

SERVICE MANUAL

STEREO POWER AMPLIFIER

SANSUI B-55



SANSUI ELECTRIC CO., LTD.

● SPECIFICATIONS

Power output

Min. RMS, both channels driven, from 20 to 20,000 Hz,
with no more than 0.03 % total harmonic distortion
30 watts per channel into 8 ohms

Load impedance 8 ohms

Total harmonic distortion

. less than 0.03 % at or below
rated min. RMS power output

Frequency response (at 1 watt)

. 5 to 70,000 Hz
+0 dB, -2 dB

Input sensitivity and impedance (1 kHz, for rated power
output) 1 V/47 kilohms

Signal to noise ratio (short-circuit, A-network)
. 120 dB

Power requirements

Power voltage 120/220/240 V
(50/60 Hz)

For U.S.A. & Canada

. 120 V (60 Hz)

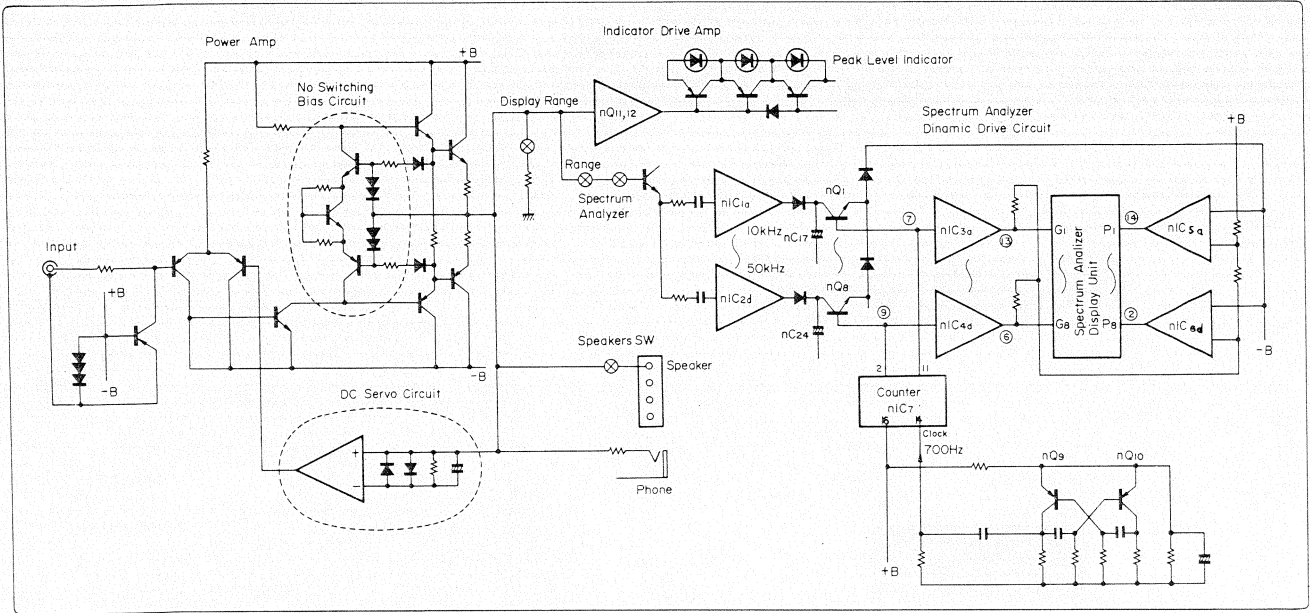
Power consumption . . 130 watts 160 VA Rated
185 watts Maximum

Dimensions 430 mm (16-15/16") W
74 mm (2-15/16") H
234 mm (9-7/32") D

Weight 4.2 kg (9.2 lbs.) net
4.7 kg (10.4 lbs.) packed

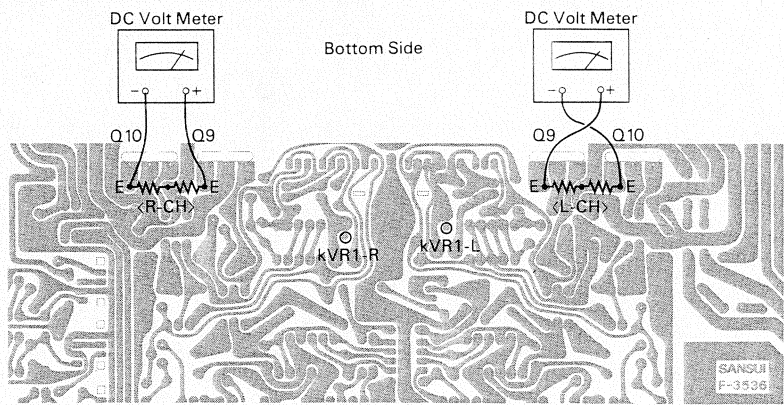
* Design and specifications subject to changes without
notice for improvements.

1. BLOCK DIAGRAM



* Since the Non Switching Bias Circuit employed in B-55 is similar to that of AU-D7 and the Spectrum Analyzer Circuit employed in B-55 is similar to that of B-77, the explanation of these circuits is omitted from this manual, therefore please refer to the page 1, 2, on service manual of AU-D7 and page 2, on service manual of B-77.

2. BIAS CURRENT ADJUSTMENT (Refer to figure below)



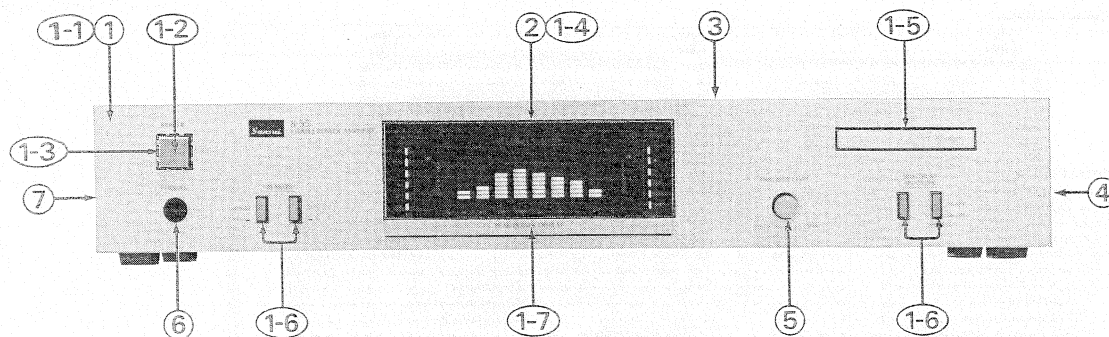
Note:

1. Room Temperature 18°C ~ 38°C
2. For adjustment, run the unit for more than 3 minutes after the power is switched on.
3. Before turning ON power switch, turn kVR1 on F-3536 fully counterwise.

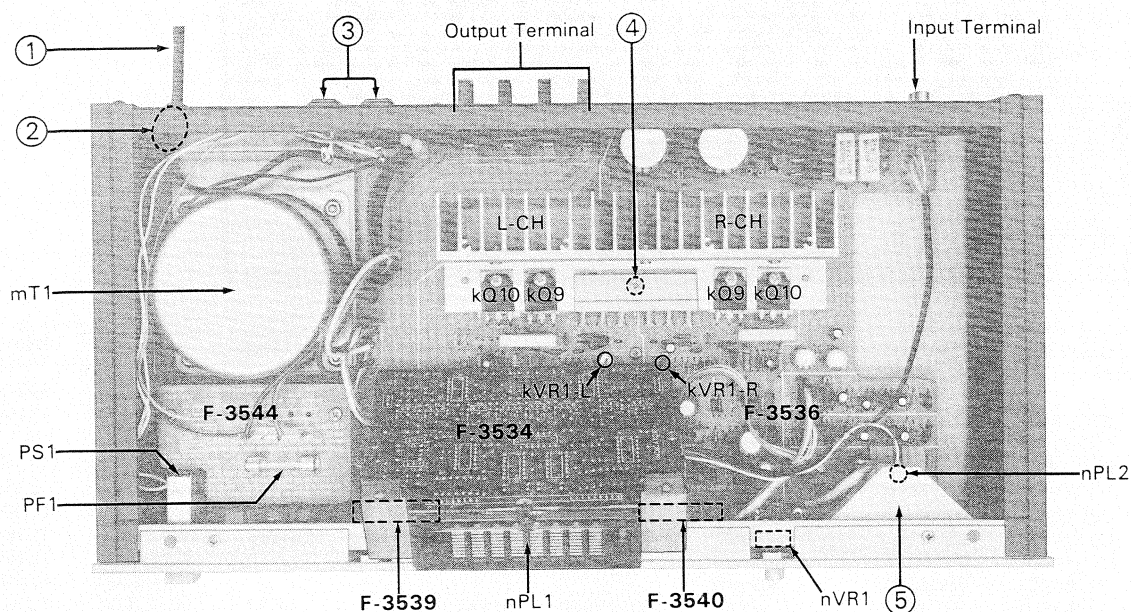
STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	L-CH	Connect DC volt meter between emitters of kQ ₉ , kQ ₁₀ on F-3536	kVR1 (L-CH) F-3536	DC 3 mV	This bias current adjustment converts current value into voltage by ohms law.
2.	R-CH	Same as above	kVR1 (R-CH) F-3536	DC 3 mV	

3. OTHER PARTS

3-1. Front View



3-2. Top View



Parts List <Front View>

Parts No.	Stock No.	Description
1	07769600	Front Panel Ass'y
1-1	07770000	Front Panel
1-2	53195000	Knob, power
1-3	59560800	Knob Guide, power
1-4	07768700	Front Glass
1-5	07768900	Badge Ass'y
1-6	07553900	Push Knob Ass'y
1-7	07768600	Dress Sash
2	07768500	Peak Power & Analyzer Scale
3	07769300	Bonnet
4	07763600	Side Panel, Right
5	07776200	Knob, Analyzer
6	46078100	Head Phone Jack
7	07763500	Side Panel, left

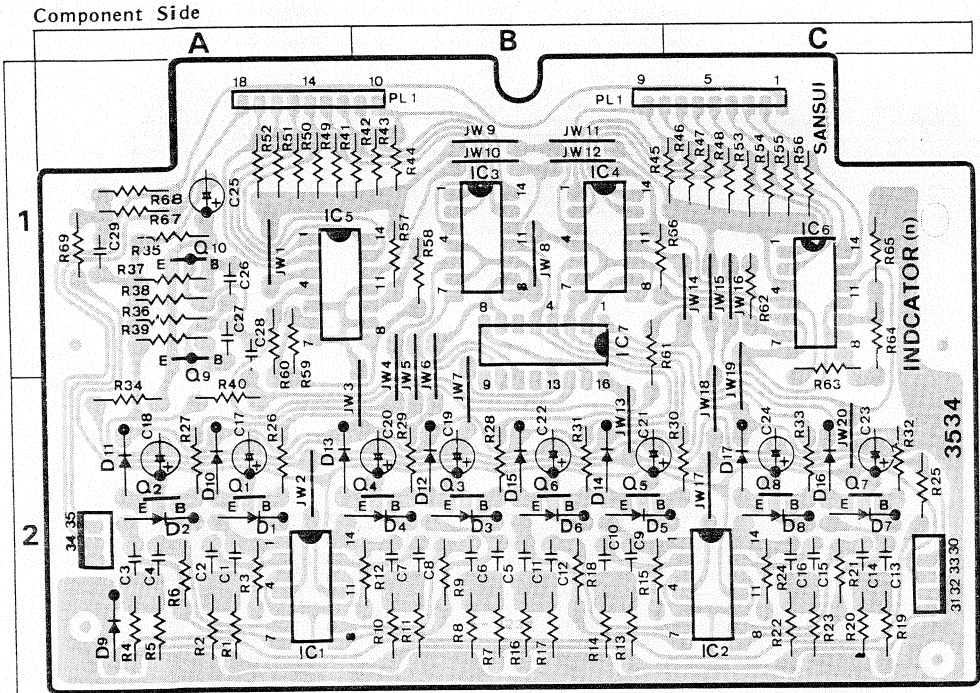
Parts List <Top View>

Parts No.	Stock No.	Description
nVR1	46118400	Variable Resistor 100k Ω (B), analyzer level
pF1	07188800	AC Fuse 3A (120V)
	07188500	AC Fuse 1.5A (220V)
mT1	15003801	Power Transformer
pS1	46087300	Power Switch
nPL1	07237800	FG64SA6, Spectrum Analyzer
1	38004700	Power Cord
2	39106000	Strain Relief
3	07189600	AC Outlet
4	07192000	Hexagon Space Screw
5	07769800	Badge Lighting Frame

4. PARTS LOCATION & PARTS LIST

4-1. F-3534 Spectrum Analyzer Circuit Board (Stock No. 00645301)

• Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the Common Parts List for capacitors & resistors which was appended previously to each Sansui Manual.

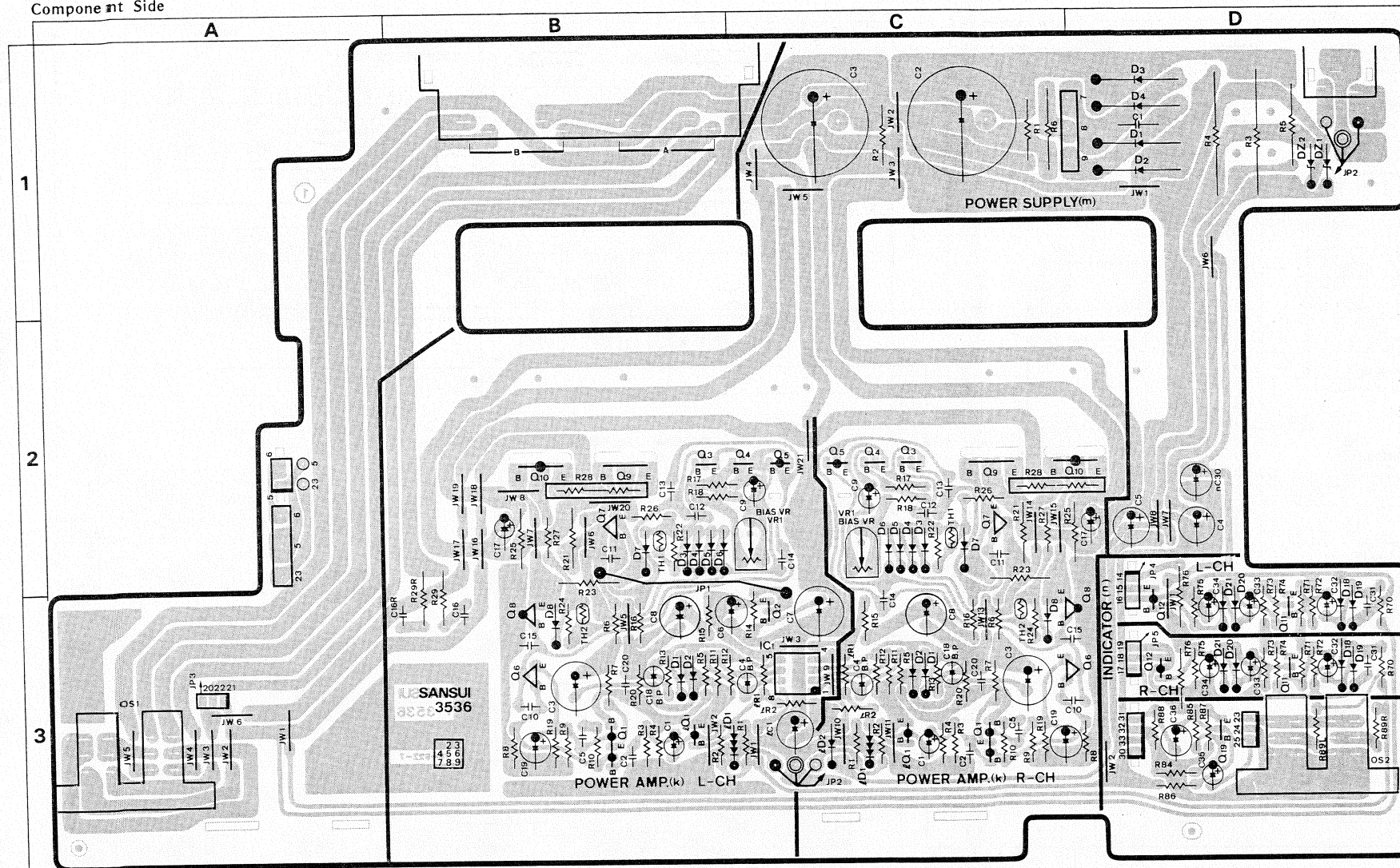


Parts List

Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
•Transistor			nIC4	07205300	IC NJM2901N	nD11	03117600	1S2473D
nQ1	07194801	2SC1815		07246300	IC MB4204M		46086000	1S1588
	03068301	2SC2320	nIC5	07205300	IC NJM2901N		46092700	US1035
	03059501	2SC945		07246300	IC MB4204M	nD12	03117600	1S2473D
nQ2	07194801	2SC1815	nIC6	07205300	IC NJM2901N		46086000	1S1588
	03068301	2SC2320		07246300	IC MB4204M		46092700	US1035
	03059501	2SC945	nIC7	07246400	IC MSM4022RS	nD13	03117600	1S2473D
nQ3	07194801	2SC1815	•Diode				46086000	1S1588
	03068301	2SC2320	nD1	03117600	1S2473D		46092700	US1035
	03059501	2SC945		46086000	1S1588	nD14	03117600	1S2473D
nQ4	07194801	2SC1815		46092700	US1035		46086000	1S1588
	03068301	2SC2320	nD2	03117600	1S2473D		46092700	US1035
	03059501	2SC945		46086000	1S1588	nD15	03117600	1S2473D
nQ5	07194801	2SC1815		46092700	US1035		46086000	1S1588
	03068301	2SC2320	nD3	03117600	1S2473D		46092700	US1035
	03059501	2SC945		46086000	1S1588	nD16	03117600	1S2473D
nQ6	07194801	2SC1815		46092700	US1035		46086000	1S1588
	03068301	2SC2320	nD4	03117600	1S2473D		46092700	US1035
	03059501	2SC945		46086000	1S1588	nD17	03117600	1S2473D
nQ7	07194801	2SC1815		46092700	US1035		46086000	1S1588
	03068301	2SC2320	nD5	03117600	1S2473D		46092700	US1035
	03059501	2SC945		46086000	1S1588	•Capacitor		
nQ8	07194801	2SC1815		46092700	US1035	nC1	07216800	68000pF 25V C.C.
	03068301	2SC2320	nD6	03117600	1S2473D	nC2	07216800	68000pF 25V C.C.
	03059501	2SC945		46086000	1S1588	nC3	07216400	33000pF 25V C.C.
nQ9	07194701	2SA1015		46092700	US1035	nC4	07216400	33000pF 25V C.C.
	03012701	2SA999	nD7	03117600	1S2473D	nC5	07215900	12000pF 25V C.C.
	07197001	2SA733A		46086000	1S1588	nC6	07215900	12000pF 25V C.C.
nQ10	07194701	2SA1015		46092700	US1035	nC7	07215600	6800pF 25V C.C.
	03012701	2SA999	nD8	03117600	1S2473D	nC8	07215600	6800pF 25V C.C.
	07197001	2SA733A		46086000	1S1588	nC9	07215200	3300pF 25V C.C.
•IC				46092700	US1035	nC10	07215200	3300pF 25V C.C.
nIC1	07205200	IC NJM2902N	nD9	03117600	1S2473D	nC26	07215900	12000pF 25V C.C.
	07258300	IC MB3614M		46086000	1S1588	nC27	07215900	12000pF 25V C.C.
nIC2	07205200	IC NJM2902N		46092700	US1035	nC29	07216600	47000pF 25V C.C.
	07258300	IC MB3614M	nD10	03117600	1S2473D			
	07205300	IC NJM2901N		46086000	1S1588			
nIC3	07246300	IC MB4204M		46092700	US1035			

4-2. F-3536 Power Amp. Circuit Board (Stock No. 00645501)

Component Side



Parts List

Parts No.	Stock No.	Description
• Transistor		
kQ1	03602901	2SA798
kQ2	07194801	2SC1815
kQ3	03067401	2SC1845
kQ4	03067401	2SC1845
kQ5	03010901	2SA992
kQ6	03064001	2SC1904
kQ7	03086101	2SD357
kQ8	03034401	2SB527
kQ9	46117901	2SC2577LBR
kQ10	46117801	2SA1102LBR
IQ1	07194701	2SA1015
	03012701	2SA999
	07197001	2SA733A
nQ11	07194801	2SC1815
	03068301	2SC2320
	03059501	2SC945
nQ12	07194701	2SA1015
	03012701	2SA999
	07197001	2SA733A
nQ19	07194801	2SC1815
	03068301	2SC2320
	03059501	2SC945
• Diode		
kD1	03117600	1S2473D
	46086000	1S1588
	46092700	US1035

Parts No.	Stock No.	Description
kD2	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
kD3	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
kD4	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
kD5	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
kD6	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
kD7	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
kD8	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
ID1	03401700	MV103
ID2	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
mD1	03115300	30D2
mD2	03115300	30D2
mD3	03115300	30D2

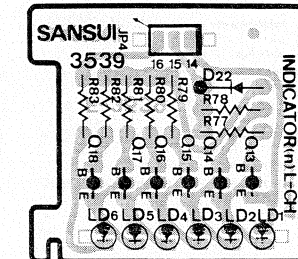
Parts No.	Stock No.	Description
mD4	03115300	30D2
nD18	07225500	1N60
nD19	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
nD20	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
nD21	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
• IC		
kIC1	03607700	NJM4558D
• Zener Diode		
mDZ1	03179200	RD15E-B
mDZ2	03179200	RD15E-B
• Resistor		
mR1	00182800	3.9kΩ 1W N.I.R.
mR2	00182800	3.9kΩ 1W N.I.R.
mR3	00107700	470Ω 5W Ce.R.
mR4	00107700	470Ω 5W Ce.R.
mR5	00189000	330Ω 2W N.I.R.
mR6	00186000	1Ω 2W N.I.R.
kTH1	03201500	Thermistor 112102-02
kTH2	03201500	Thermistor 112102-02

Parts No.	Stock No.	Description
kR28	08310100	0.33 x 2 3W Ce.R.
kC4	08450900	4.7μF 16V E.B.
kC18	08450100	10μF 6.3V E.B.
kVR1	10370600	Semi Variable Resistor 5kΩ (B) Bias Current Adj.
mC2	46117700	4700μF 50V E.C.
mC3	46117700	4700μF 50V E.C.
nR76	00183800	560Ω 1W N.I.R.
nC31	07215800	10000pF 25V C.C.
oS1	46089900	Push Switch (Speakers)
oS2	07209800	Push Switch (Analyzer)
	46094600	Output Terminal
nPL2	07234400	Lamp 8V
	07249000	2P Input Terminal

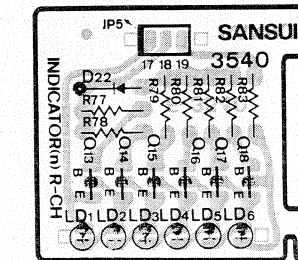
4-3. F-3539 & F-3540 Peak Level Indicator Circuit Board

(Stock No. 00645801 = F-3539/00645901 = F-3540)

Component Side <F-3539>



Component Side <F-3540>



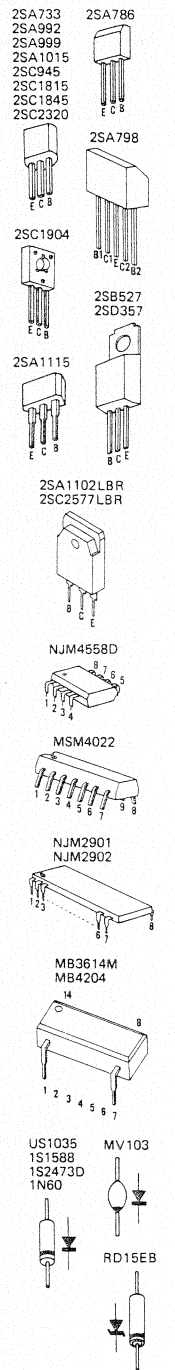
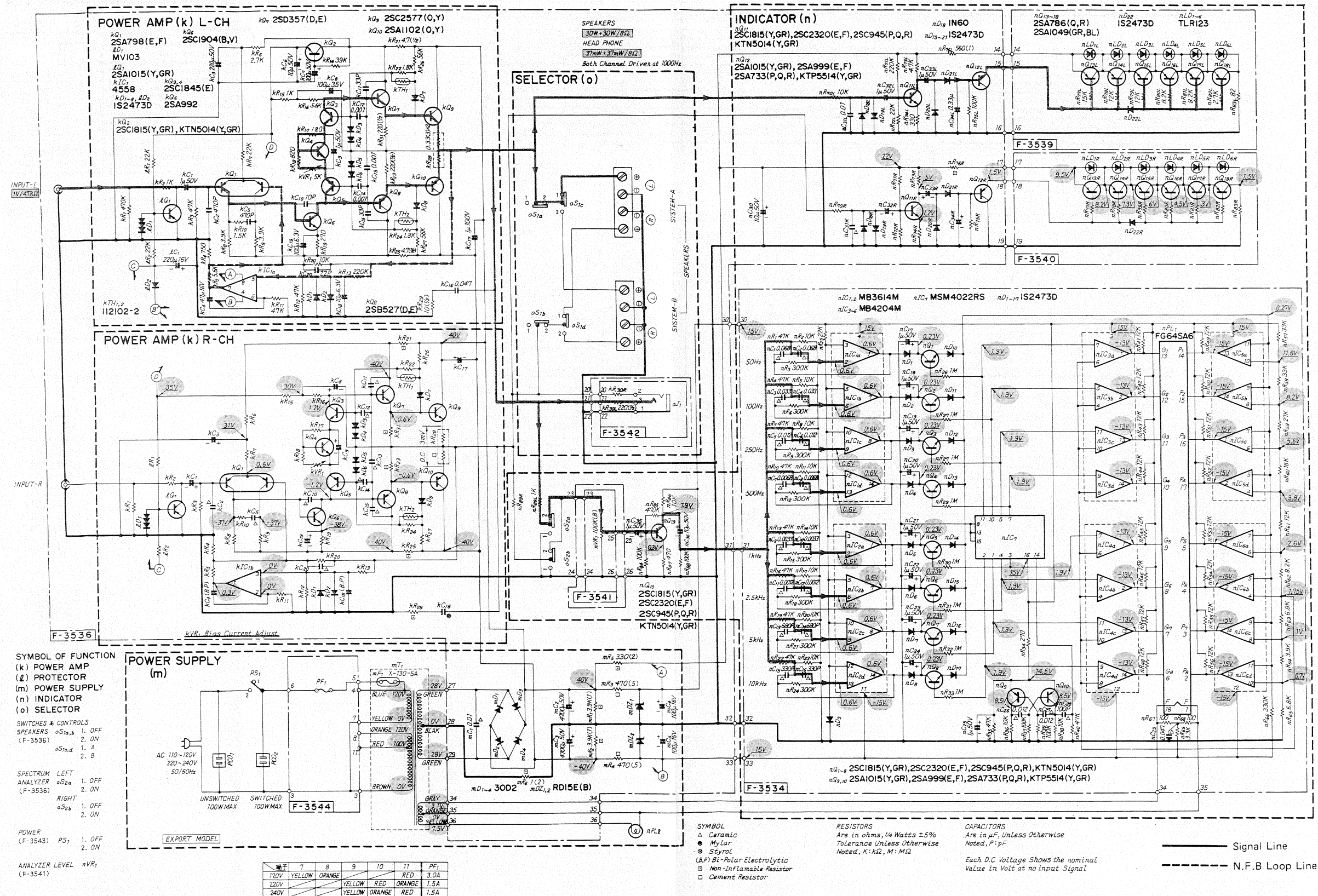
Parts List <F-3539/F-3540>

Parts No.	Stock No.	Description
• Transistor		
nQ13	03012501	2SA786
	07299601	2SA1115
nQ14	03012501	2SA786
	07299601	2SA1115
nQ15	03012501	2SA786
	07299601	2SA1115
nQ16	03012501	2SA786
	07299601	2SA1115
nQ17	03012501	2SA786
	07299601	2SA1115
nQ18	03012501	2SA786
	07299601	2SA1115
• Diode		
nD22	03117600	1S2473D
	46086000	1S1588
	46092700	US1035
nLD1	46095200	TLR123 LED
nLD2	46095200	TLR123 LED
nLD3	46095200	TLR123 LED
nLD4	46095200	TLR123 LED
nLD5	46095200	TLR123 LED
nLD6	46095200	TLR123 LED
	07769100	6P LED Holder

• Abbreviations

C.R. . . Carbon Resistor	E.L. . . Low Leak Electrolytic Capacitor
S.R. . . Solid Resistor	E.B. . . Bi-Polar Electrolytic Capacitor
Ce.R. . . Cement Resistor	E.B.L. . . Low Leak Bi-Polar Electrolytic Capacitor
M.R. . . Metal Film Resistor	F.C. . . Film Capacitor
F.R. . . Fusing Resistor	Ta.C. . . Tantalum Capacitor
N.I.R. . . Non-Inflammable Resistor	F.C. . . Film Capacitor
C.C. . . Ceramic Capacitor	M.P. . . Metalized Paper Capacitor
C.T. . . Ceramic Capacitor, Temperature Compensation	P.C. . . Polystyrene Capacitor
E.C. . . Electrolytic Capacitor	G.C. . . Gimmic Capacitor

5. SCHEMATIC DIAGRAM



6. INTERIOR BLOCK DIAGRAM OF IC

• MSM4022RS

Fig. 1

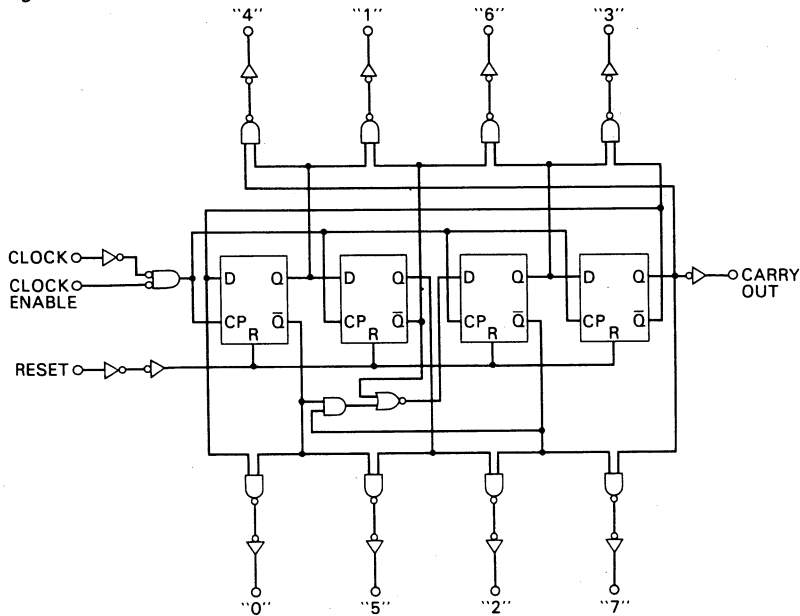


Fig. 2

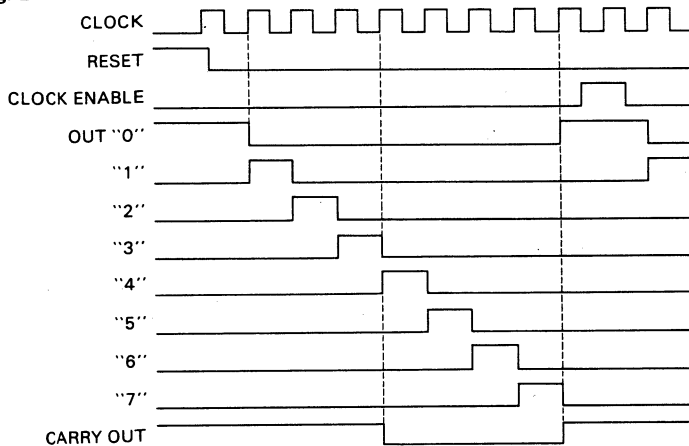
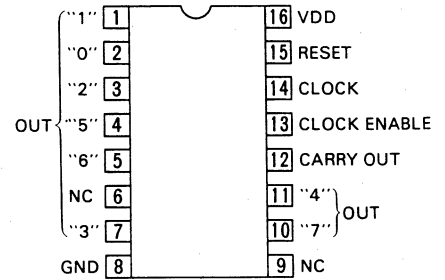
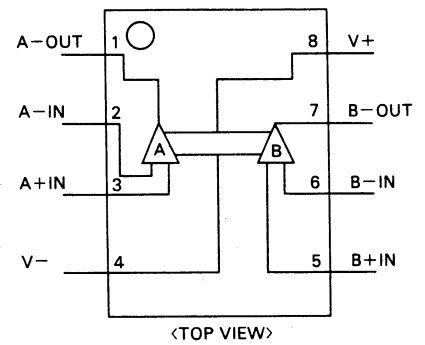


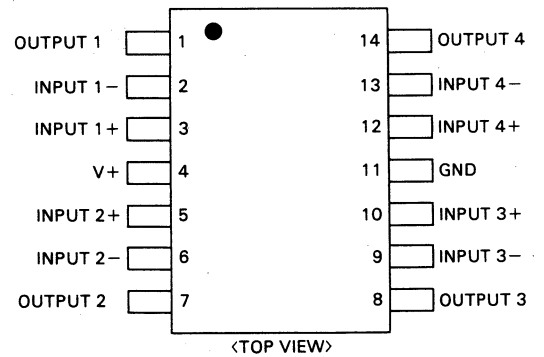
Fig. 3



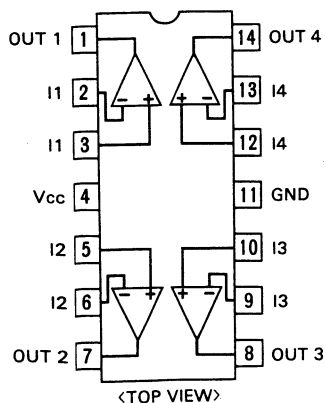
• NJM4558D



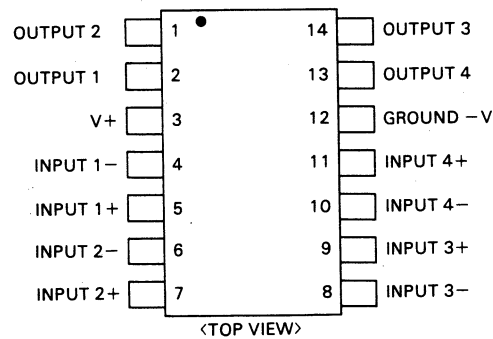
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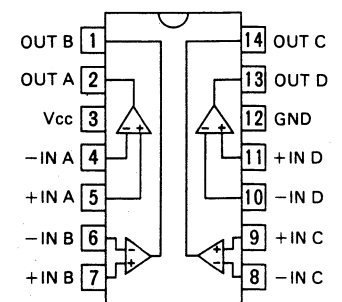
• MB3614M



• MJM2901N

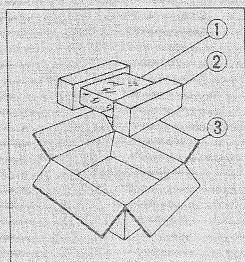


• MB4204M



7. PACKING LIST

Parts No.	Stock No.	Description
1	07599500	Vinyl Cover
2	07585700	Styrofoam Packing
3	07775400	Carton Case



8. ACCESSORY

Stock No.	Description
46093400	Operating Instruction



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